

WHAT IS CLAIMED IS

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1. An information processing apparatus comprising:
  - a plurality of information recording media respectively having a generally paper shape with an image display surface for displaying various information, said image display surface of each of the information recording media having peripheral portions including a holding portion and recorded with identification information in one of the peripheral portions other than the holding portion, said identification information recorded on each of the information recording media indicating a storage location of one page of display image information written on the information recording medium and prestored in storage means;
  - 20 a holding part which holds the holding portion of each of the information recording media which are stacked;
  - information input means for accepting an input of various information by handwriting on an arbitrary one of the information recording media which is used as a
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writing target;

identification information recognizing means for  
recognizing the identification information recorded on  
the arbitrary information recording medium which is used  
5 as the writing target;

information storing means for storing the various  
information accepted by said information input means and  
the identification information recognized by said  
identification information recognizing means in an  
10 information storage medium by linking corresponding  
various information and identification information; and  
information output means for outputting the various  
information stored in the information storage medium  
with respect to said storage means which stores various  
15 information at storage locations specified in advance  
depending on the identification information.

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2. The information processing apparatus as  
claimed in claim 1, wherein:

said storage means is formed by an externally  
connected computer;

25 said information storing means links the various

information input by handwriting on the arbitrary  
information recording medium to the identification  
information and stores the various information and the  
identification information in the information storage  
5 medium after recognizing from the arbitrary information  
recording medium by said identification information  
recognizing means the identification information which  
corresponds one-to-one to one page of a document stored  
within the computer; and

10       said information output means transfers the various  
information stored in the information storage medium to  
the computer to overwrite the various information on  
display image information of one page of the document  
which corresponds one-to-one, based on the linked  
15 identification information.

20           3. The information processing apparatus as  
claimed in claim 1, wherein:  
              said storage means is formed by the information  
storage medium;  
              said information storing means links the various  
25 information input by handwriting on the arbitrary

information recording medium to the identification information and stores the various information and the identification information in the information storage medium after recognizing from the arbitrary information recording medium by said identification information

5 recognizing means the identification information which corresponds one-to-one to one page of a document stored within the information storage medium; and

    said information output means transfers the various

10 information stored in the information storage medium within the information storage medium to overwrite the various information on display image information of one page of the document which corresponds one-to-one, based on the linked identification information.

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4. The information processing apparatus as

20 claimed in claim 1, further comprising:

    additional writing detecting means for detecting a handwriting input operation on the arbitrary information recording medium; and

    an identification information recognizing operation

25 control means for controlling said identification

information recognizing means to recognize the identification information based on the handwriting input operation detected by said additional writing detecting means.

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5. The information processing apparatus as  
10 claimed in claim 1, wherein the identification  
information of the arbitrary information recording  
medium is recorded on one of the peripheral portions of  
the image display surface confronting the holding

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6. The information processing apparatus as  
20 claimed in claim 1, wherein the identification  
information of the arbitrary information recording  
medium is recorded on one of the peripheral portions of  
the image display surface adjacent to the holding  
portion.

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7. The information processing apparatus as  
claimed in claim 1, wherein the identification  
information includes a two-dimensional code, and said  
identification information recognizing means includes a  
5 two-dimensional code reader.

10 8. The information processing apparatus as  
claimed in claim 1, wherein the identification  
information includes a one-dimensional code, and said  
identification information recognizing means includes a  
one-dimensional code reader.

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9. The information processing apparatus as  
20 claimed in claim 1, wherein the identification  
information is recorded on the arbitrary information  
recording medium so as to reflect light in a region  
other than a visible region with respect to incident  
light having a specific wavelength.

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10. The information processing apparatus as claimed in claim 1, further comprising:

power starting means for starting a power supply when said holding part holds the information recording media.

10 11. An information processing apparatus comprising:

a plurality of information recording media respectively having a generally paper shape with an image display surface for rewritably displaying various 15 information, said image display surface of each of the information recording media having peripheral portions including a holding portion and recorded with identification information in one of the peripheral portions other than the holding portion, said 20 identification information recorded on each of the information recording media indicating a storage location of one page of display image information written on the information recording medium and prestored in storage means;

each of the information recording media which are stacked;

information input means for accepting an input of various information by handwriting on the information 5 recording media;

additional writing means for additionally inputting desired various information by handwriting on an arbitrary one of the information recording media;

identification information recognizing means for 10 recognizing the identification information recorded on the arbitrary information recording medium which is used as the writing target;

information storing means for storing the various information input by said additional writing means and 15 accepted by said information input means and the identification information recognized by said identification information recognizing means in an information storage medium by linking corresponding various information and identification information; and

20 information output means for outputting the various information stored in the information storage medium with respect to said storage means which stores various information at storage locations specified in advance depending on the identification information.

12. The information processing apparatus as claimed in claim 11, wherein:

    said storage means is formed by an externally connected computer;

5       said information storing means links the various information input by handwriting on the arbitrary information recording medium to the identification information and stores the various information and the identification information in the information storage 10 medium after recognizing from the arbitrary information recording medium by said identification information recognizing means the identification information which corresponds one-to-one to one page of a document stored within the computer; and

15       said information output means transfers the various information stored in the information storage medium to the computer to overwrite the various information on display image information of one page of the document which corresponds one-to-one, based on the linked 20 identification information.

25       13. The information processing apparatus as

claimed in claim 11, wherein:

    said storage means is formed by the information storage medium;

    said information storing means links the various 5 information input by handwriting on the arbitrary information recording medium to the identification information and stores the various information and the identification information in the information storage medium after recognizing from the arbitrary information 10 recording medium by said identification information recognizing means the identification information which corresponds one-to-one to one page of a document stored within the information storage medium; and

    said information output means transfers the various 15 information stored in the information storage medium within the information storage medium to overwrite the various information on display image information of one page of the document which corresponds one-to-one, based on the linked identification information.

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14. The information processing apparatus as 25 claimed in claim 11, further comprising:

additional writing detecting means for detecting a handwriting input operation on the arbitrary information recording medium; and

an identification information recognizing operation  
5 control means for controlling said identification  
information recognizing means to recognize the  
identification information based on the handwriting  
input operation detected by said additional writing  
detecting means.

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15. The information processing apparatus as  
15 claimed in claim 11, wherein the identification  
information of the arbitrary information recording  
medium is recorded on one of the peripheral portions of  
the image display surface confronting the holding  
portion.

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16. The information processing apparatus as  
25 claimed in claim 11, wherein the identification

information of the arbitrary information recording medium is recorded on one of the peripheral portions of the image display surface adjacent to the holding portion.

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17. The information processing apparatus as  
10 claimed in claim 11, wherein the identification information includes a two-dimensional code, and said identification information recognizing means includes a two-dimensional code reader.

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18. The information processing apparatus as  
claimed in claim 11, wherein the identification  
20 information includes a one-dimensional code, and said identification information recognizing means includes a one-dimensional code reader.

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19. The information processing apparatus as  
claimed in claim 11, wherein the identification  
information is recorded on the arbitrary information  
recording medium so as to reflect light in a region  
5 other than a visible region with respect to incident  
light having a specific wavelength.

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20. The information processing apparatus as  
claimed in claim 11, further comprising:  
power starting means for starting a power supply  
when said holding part holds the information recording  
15 media.

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21. The information processing apparatus as  
claimed in claim 1, further comprising:  
storing means, formed by the information storage  
medium, for storing data;  
reading means for reading a first personal  
25 identification number recorded on the information

recording medium;

judging means for judging whether or not the first personal identification number read by said reading means matches a second personal identification number

control means for storing the data in said storing means when said judging means judges that the first and second personal identification numbers match.

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22. The information processing apparatus as  
claimed in claim 21, wherein said control means stores  
15 the data in a region which is within said storing means  
and is indicated on the information recording medium.

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23. The information processing apparatus as claimed in claim 21, further comprising:

fixing means for fixing a first part forming a peripheral portion of the information recording medium,

identification number recorded on a second part of the peripheral portion different from the first part.

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24. The information processing apparatus as claimed in claim 1, further comprising:

reading means for reading a first personal  
10 identification number recorded on the information  
recording medium;

judging means for judging whether or not the first  
personal identification number read by said reading  
means matches a second personal identification number  
15 which is set in advance; and

control means for storing the data in the storage  
means which is externally connected to the information  
processing apparatus when said judging means judges that  
the first and second personal identification numbers  
20 match.

25. The information processing apparatus as

claimed in claim 21, wherein:

    said reading means reads from the information recording medium document specifying information which specifies a document stored in the storing means, and

5      said control means overwrites the data with respect to the document which is specified by the document specifying information read by said reading means.

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26. The information processing apparatus as claimed in claim 24, wherein:

    said reading means reads from the information recording medium document specifying information which specifies a document stored in the storing means, and

15      said control means overwrites the data with respect to the document which is specified by the document specifying information read by said reading means.

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27. The information processing apparatus as  
25 claimed in claim 1, wherein:

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the information recording medium is recorded with additional writing enable/disable information which indicates whether or not an additional writing is possible with respect to a document which is already recorded on the information recording medium,

enable/disable information, and

10 said control means stores the data in the storing means only when the additional writing enable/disable information read by said reading means indicates that an additional writing is possible.

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28. The information processing apparatus as claimed in claim 24, wherein:

the information recording medium is recorded with additional writing enable/disable information which indicates whether or not an additional writing is possible with respect to a document which is already recorded on the information recording medium,

enable/disable information, and

25 said control means stores the data in the storing

means only when the additional writing enable/disable information read by said reading means indicates that an additional writing is possible.

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29. The information processing apparatus as claimed in claim 11, further comprising:

10       storing means, formed by the information storage medium, for storing data;

          reading means for reading a first personal identification number recorded on the information recording medium;

15       judging means for judging whether or not the first personal identification number read by said reading means matches a second personal identification number which is set in advance; and

          control means for storing the data in said storing means when said judging means judges that the first and 20 second personal identification numbers match.

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30. The information processing apparatus as claimed in claim 29, wherein said control means stores the data in a region which is within said storing means and is indicated on the information recording medium.

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31. The information processing apparatus as  
10 claimed in claim 29, further comprising:

fixing means for fixing a first part forming a peripheral portion of the information recording medium, said reading means reading the first personal identification number recorded on a second part of the peripheral portion different from the first part.

20 32. The information processing apparatus as  
claimed in claim 11, further comprising:

reading means for reading a first personal identification number recorded on the information recording medium;

personal identification number read by said reading means matches a second personal identification number which is set in advance; and

control means for storing the data in the storage 5 means which is externally connected to the information processing apparatus when said judging means judges that the first and second personal identification numbers match.

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33. The information processing apparatus as claimed in claim 29, wherein:

15 said reading means reads from the information recording medium document specifying information which specifies a document stored in the storing means, and said control means overwrites the data with respect to the document which is specified by the document 20 specifying information read by said reading means.

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34. The information processing apparatus as

claimed in claim 32, wherein:

    said reading means reads from the information recording medium document specifying information which specifies a document stored in the storing means, and

5      said control means overwrites the data with respect to the document which is specified by the document specifying information read by said reading means.

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    35. The information processing apparatus as claimed in claim 11, wherein:

    the information recording medium is recorded with  
15 additional writing enable/disable information which indicates whether or not an additional writing is possible with respect to a document which is already recorded on the information recording medium,

    said reading means reads the additional writing  
20 enable/disable information, and

    said control means stores the data in the storing means only when the additional writing enable/disable information read by said reading means indicates that an additional writing is possible.

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36. The information processing apparatus as claimed in claim 32, wherein:

the information recording medium is recorded with additional writing enable/disable information which

5 indicates whether or not an additional writing is possible with respect to a document which is already recorded on the information recording medium,

said reading means reads the additional writing enable/disable information, and

10 said control means stores the data in the storing means only when the additional writing enable/disable information read by said reading means indicates that an additional writing is possible.

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37. An information recording medium comprising:

20 a member having a generally paper shape and an image display surface for displaying various information; and

identification information recorded in one of peripheral portions of the image display surface other 25 than a holding portion, and indicating a storage

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location of one page of display image information  
prestored in storage means.

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38. The information recording medium as  
claimed in claim 37, wherein the identification  
information reflects light in a region other than a  
10 visible region with respect to incident light having a  
specific wavelength.

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39. An information recording medium  
comprising:

a member having a generally paper shape and an  
image display surface for rewritably displaying and  
20 maintaining various information; and  
identification information recorded in one of  
peripheral portions of the image display surface other  
than a holding portion, and indicating a storage  
location of one page of display image information  
25 prestored in storage means.

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40. The information recording medium as  
claimed in claim 39, wherein the identification  
information reflects light in a region other than a  
visible region with respect to incident light having a  
5 specific wavelength.

10           41. The information recording medium as  
claimed in claim 37, further comprising:  
              a recording layer at least including a leuco dye  
and a developer and recorded with a first personal  
identification number,  
15           said first personal identification number being  
read by reading means, and characters being recorded  
with respect to said recording layer when the first  
personal identification number matches a second personal  
identification number which is set in advance.

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42. The information recording medium as  
25 claimed in claim 41, wherein the first personal

identification number is rewritable with respect to said recording layer.

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43. The information recording medium as claimed in claim 37, further comprising:

a recording layer made of a resin layer including  
10 organic compound grains and recorded with a first  
personal identification number,  
said first personal identification number being  
read by reading means, and characters being recorded  
with respect to said recording layer when the first  
15 personal identification number matches a second personal  
identification number which is set in advance.

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44. The information recording medium as claimed in claim 43, wherein the first personal identification number is rewritable with respect to said recording layer.

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45. The information recording medium as claimed in claim 37, further comprising:

a recording layer including a liquid crystal compound and recorded with a first personal 5 identification number,

said first personal identification number being read by reading means, and characters being recorded with respect to said recording layer when the first personal identification number matches a second personal 10 identification number which is set in advance.

15 46. The information recording medium as claimed in claim 45, wherein the first personal identification number is rewritable with respect to said recording layer.

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47. The information recording medium as claimed in claim 39, further comprising:

25 a recording layer at least including a leuco dye

and a developer and recorded with a first personal identification number,

5 said first personal identification number being read by reading means, and characters being recorded with respect to said recording layer when the first personal identification number matches a second personal identification number which is set in advance.

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48. The information recording medium as claimed in claim 47, wherein the first personal identification number is rewritable with respect to said 15 recording layer.

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49. The information recording medium as claimed in claim 39, further comprising:

a recording layer made of a resin layer including organic compound grains and recorded with a first personal identification number,

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said first personal identification number being

read by reading means, and characters being recorded with respect to said recording layer when the first personal identification number matches a second personal identification number which is set in advance.

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50. The information recording medium as  
10 claimed in claim 49, wherein the first personal identification number is rewritable with respect to said recording layer.

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51. The information recording medium as  
claimed in claim 39, further comprising:  
a recording layer including a liquid crystal  
20 compound and recorded with a first personal identification number,  
said first personal identification number being  
read by reading means, and characters being recorded  
with respect to said recording layer when the first  
25 personal identification number matches a second personal

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identification number which is set in advance.

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52. The information recording medium as claimed in claim 51, wherein the first personal identification number is rewritable with respect to said recording layer.

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53. An information processing apparatus for generating data corresponding to characters written on an information recording medium, characterized by:

storing means for storing the data;  
reading means for reading a first personal identification number recorded on the information recording medium;  
judging means for judging whether or not the first personal identification number read by said reading means matches a second personal identification number which is set in advance; and  
control means for storing the data in said storing

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means when said judging means judges that the first and second personal identification numbers match.

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54. The information processing apparatus as claimed in claim 53, wherein said control means stores the data in a region which is within said storing means 10 and is indicated on the information recording medium.

15 55. The information processing apparatus as claimed in claim 53, further comprising:

fixing means for fixing a first part forming a peripheral portion of the information recording medium, 20 said reading means reading the first personal identification number recorded on a second part of the peripheral portion different from the first part.

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56. An information processing apparatus for generating data corresponding to characters written on an information recording medium, characterized by:

reading means for reading a first personal  
5 identification number recorded on the information  
recording medium;

judging means for judging whether or not the first  
personal identification number read by said reading  
means matches a second personal identification number  
10 which is set in advance; and

control means for storing the data in an externally  
connected storage means when said judging means judges  
that the first and second personal identification  
numbers match.

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57. The information processing apparatus as  
20 claimed in claim 53, wherein:

said reading means reads from the information  
recording medium document specifying information which  
specifies a document stored in the storing means, and  
said control means overwrites the data with respect  
25 to the document which is specified by the document

specifying information read by said reading means.

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58. The information processing apparatus as claimed in claim 56, wherein:

    said reading means reads from the information recording medium document specifying information which  
10     specifies a document stored in the storing means, and  
    said control means overwrites the data with respect to the document which is specified by the document specifying information read by said reading means.

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59. The information processing apparatus as claimed in claim 53, wherein:

20     the information recording medium is recorded with additional writing enable/disable information which indicates whether or not an additional writing is possible with respect to a document which is already recorded on the information recording medium,  
25     said reading means reads the additional writing

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enable/disable information, and  
said control means stores the data in the storing  
means only when the additional writing enable/disable  
information read by said reading means indicates that an  
5 additional writing is possible.

10 60. The information processing apparatus as  
claimed in claim 56; wherein:

the information recording medium is recorded with  
additional writing enable/disable information which  
indicates whether or not an additional writing is  
15 possible with respect to a document which is already  
recorded on the information recording medium,

said reading means reads the additional writing  
enable/disable information, and

20 said control means stores the data in the storing  
means only when the additional writing enable/disable  
information read by said reading means indicates that an  
additional writing is possible.

61. An information processing system for generating and processing data corresponding to characters written on an information recording medium, characterized by:

- 5        storing means for storing the data;
- recording means for recording a first personal identification number on the information recording medium;
- reading means for reading the first personal
- 10      identification number which is recorded on the information recording medium by said recording means;
- judging means for judging whether or not the first personal identification number read by said reading means matches a second personal identification number
- 15      which is set in advance; and
- control means for storing the data in said storing means when said judging means judges that the first and second personal identification numbers match.

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62. An information processing system for generating and processing data corresponding to characters recorded on an information recording medium

which is recorded with print enable/disable information which indicates whether or not a printing is possible, characterized by:

recording means for recording the print  
5 enable/disable information on the information recording medium;

reading means for reading the print enable/disable information which is recorded on the information recording medium by said recording means; and

10 printing means for printing the characters on the information recording medium depending on the data when the print enable/disable information read by said reading means indicates that the printing is possible.

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63. An information recording medium which becomes a writing target when generating data  
20 corresponding to written characters, characterized by:

a recording layer at least including a leuco dye and a developer and recorded with a first personal identification number,

said first personal identification number being  
25 read by reading means, and characters being recorded

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with respect to said recording layer when the first personal identification number matches a second personal identification number which is set in advance.

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64. An information recording medium which becomes a writing target when generating data  
10 corresponding to written characters, characterized by:  
a recording layer made of a resin layer including organic compound grains and recorded with a first personal identification number,  
said first personal identification number being  
15 read by reading means, and characters being recorded with respect to said recording layer when the first personal identification number matches a second personal identification number which is set in advance.

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65. An information recording medium which becomes a writing target when generating data  
25 corresponding to written characters, characterized by:

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a recording layer including a liquid crystal compound and recorded with a first personal identification number,

5 said first personal identification number being read by reading means, and characters being recorded with respect to said recording layer when the first personal identification number matches a second personal identification number which is set in advance.

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66. The information recording medium as claimed in claim 63, wherein the first personal 15 identification number is rewritable with respect to said recording layer.

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67. The information recording medium as claimed in claim 66, wherein an optical characteristic of said recording layer changes reversible with respect to temperature.

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